

# SANTA CLARA FIRE DEPARTMENT

## Fire Prevention & Hazardous Materials Division



# EXHIBITS, TRADE SHOWS, AND SIMILAR SPECIAL EVENTS

## **SCOPE:**

Exhibits, trade shows, or similar events (including concerts) with an anticipated attendance of more than 500 people require a permit to be obtained from the Fire Prevention and Hazardous Materials Division. Events that do not conform to the pre-approved master plans may also require a permit regardless of anticipated attendance.

## **DEFINITIONS:**

**Assembly Permit Required:** For the purposes of this guideline, a gathering of 500 or more persons for a specific event.

**Booths, single and multi-level:** Assembled display structures for displaying sales literature and product demonstrations. Multi-level booths are characterized as having human occupancy above the floor or ground.

**Class K Fire Extinguisher:** Fire extinguisher that has been subjected to special tests on cooking appliances using combustible cooking media.

**Cooking:** Heat food products to over 200 degrees by baking, boiling, deep fat frying, sautéing, etc.

**Exit:** That portion of a means of egress system which is separated from other interior spaces of a building or structure by fire-resistance rated construction and opening protection as required to provide a protected path of egress travel between the exit access and exit discharge. Exits include exterior exit doors at ground level, exit enclosures, exit passageways, exterior stairs, exterior exit ramps and horizontal exits.

**Exit Travel Distance:** Distance from any point within a building to an exit.

**Hot Work:** Working metal, glass, jewelry, or other materials by brazing, soldering, flames, grinding, producing sparks or welding.

**LP-gas:** Compressed liquid petroleum gas consisting mainly of propane with a lesser amount of butane and pentane.

## **PERMIT FEES:**

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the City of Santa Clara Municipal Fire & Environmental Code.

## **SUBMITTAL REQUIREMENT**

1. The application should be submitted a minimum of four weeks prior to the event. Plans may be accepted inside of four weeks when Expedite Fees are applied, and staff is available to review the submittal within the given timeframe; **For information on Building Division applications please contact the Building Division at 408-615-2420.**
2. An application must be completed for each submittal;

3. A minimum of three sets of scaled plans shall be submitted at time of application;
  - a. Minimum 11-inch x 17-inch paper;
  - b. All drawings shall be drawn to a measurable scale. i.e., 1/8 inch = 1 foot, 1 inch = 10 feet;
  - c. Description and name of the event shall be denoted;
  - d. Information regarding the contact person, his/her cell phone number, email, the move-in and move-out date;
  - e. Plans shall depict the location of all rooms, adjoining rooms and corridors in relation to event to the exterior exit locations;
  - f. Name of all room(s), or area(s) on the plans shall be clearly denoted;
  - g. Length, and width of room(s);
  - h. Location and dimensions of all available exits.
  - i. Widths of all aisles and cross aisles;
  - j. Maximum occupant load permitted in the usable area shall be calculated and provided.
  - k. A line legend shall be provided to show the difference between walls, curtains and other items within the room or space;
  - l. Types of exhibition or trade show items on display. Display items: Stages, platforms, equipment, materials, booths, vehicles, cameras, sound booths and food service areas);
  - m. Tables, chairs and booths along with their sizes and seating arrangement;
  - n. Routing of temporary electrical distribution and protection of electrical equipment and cables;
  - o. Location of fire appliances, such as fire alarm audio/visual devices, manual pull stations, fire extinguishers, fire hose cabinets, etc.

### **ADDITIONAL PERMITS REQUIRED:**

Operations that require separate permits include, but not limited to the following:

- a. Flame effects;
- b. Smoke or haze effects;
- c. Fireworks/pyrotechnics;
- d. Hot Work Operations;
- e. Liquid or gas-fueled vehicles or equipment for display;
- f. Compressed gases, cryogenic fluids, or other hazardous materials;
- g. Fire systems for covered booths exceeding 1,000 square feet.

### **INSPECTION SCHEDULING:**

After the plans are approved, an inspection will need to be schedule by the event applicant prior to commencement of any permitted event. Additional inspections may be conducted during the event to ensure continued compliance.

Convention Center Management shall be responsible for correction for all violation founds.

## **FIRE WATCH REQUIRED:**

A Fire Watch is required whenever the fire alarm system is placed in event mode. When required a minimum of two (2) inspectors are required for the event, and additional fees will be applicable. Additional fire watch personnel may be required based on the complexity of the event or attendance projections.

## **GENERAL REQUIREMENTS:**

### **1. Means of Egress:**

- a. Exits and their capacity shall be in accordance California Fire Code, or master egress plans approved by Community Development Department, Building Division;
- b. The available exit capacity must be greater than or equal to the approved occupant load.
  - i. Occupant Loads are to be controlled by the exhibition or trade show operator and reported accurately in the plan. Exhibit, trade show, or special event permits shall be revoked when the actual occupant load exceeds the approved/reported occupant load.
  - ii. Maximum occupant load shall be calculated versus the total or usable square footage of the room. Maximum occupant load shall be calculated by dividing the square footage of room or space by the applicable occupant load factor below:

<b>FUNCTION OF SPACE</b>	<b>OCCUPANT LOAD FACTOR</b>
General Session (Chairs Only/Standing)	7 net*
Registration	15 net
Tables and Chairs (Unconcentrated)	15 net *
Stages and Platforms	15 net*
Exhibition Floors	30 net *
Business Centers	100 gross**
Back Stage	200 gross**
Kitchens	200 gross**

\*Net = remaining area excluding non-usable circulation space (e.g. space taken by décor, displays, props, etc.);

\*\* Gross = all area including non-usable circulation space (e.g. equipment, pillars, stock items, e t c . )

### **2. Means of Egress (Exiting):**

- a. Exit capacity of level exit access and doors: An exit width of 0.2 inches per occupant shall be provided;
- b. Exit capacity of stairs shall be calculated at 0.3 inch per occupant shall be provided;
- c. The exit access ways shall not be less than the combined required capacity of the converging aisles. Width of access ways need not be greater than the required width of the exit doors to which they lead;
- d. Exiting shall be provided on at least 2 sides of the room being occupied. If 2 or more exits are required in assembly occupancy, they must be separated by a minimum distance equal to or greater than one third (1/3) the diagonal distance of the room being used to achieve the adequate exiting separation distance;
- e. The available exit capacity must be great than or equal to the approved occupant load;
- f. Booths, tables, displays and the like shall not restrict the required exit capacity.

### **3. Booth Construction:**

- a. Booth construction is to be made of materials complying with California Fire Code as follows:

- i. Noncombustible materials;
- ii. Wood exceeding ¼ inch nominal thickness;
- iii. Wood that is pressure-treated, fire-retardant wood meeting the requirements of NFPA 703, Standard for Fire-Retardant Coatings for Building Materials;
- iv. Flame-retardant material complying with NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films;
- v. Textile wall coverings, such as carpeting and similar products used in wall or ceiling finishes complying with Chapter 8 of the California Fire Code;
- vi. Plastics limited to a Class A flame spread index;
- vii. Foamed plastics and materials containing foamed plastics complying with Chapter 8 of the California Fire Code;
- viii. Cardboard, honeycombed paper, and other combustible materials having a heat release rate for any single fuel package that does not exceed 150 kW where tested in accordance with UL 1975, Standard for the fire Tests for Foamed plastics Used of Decorative Purposes;
- ix. Covered booths exceeding 1,000 square feet shall be provided with interior automatic sprinkler protection.

#### **4. Fire Protection & Life Safety:**

- a. Fire protection and life safety features or components (e.g. EXIT signs, emergency lighting, fire alarm devices, fire extinguisher cabinets, hose cabinets, strobes, and horns) shall be obstructed by decorations or setup materials.
- b. Ceiling suspended curtains, drapes and textiles in exhibition spaces are to have a minimum of 18 inches of clear space between the top of material and the sprinkler deflector.

**Exception:** Materials hung within six inches of a wall.

- c. Additional fire extinguishers may be required for placement in an exhibition hall assembly to provide;
- d. Special hazards, i.e., hot works and cooking shall be provided with a fire extinguisher suitable for the hazard. A Class K fire extinguisher shall be provided for demonstration cooking

#### **5. Electrical Safety:**

- a. All electrical controls, breakers, fuses and switches must be enclosed in approved enclosures and provide adequate working space and clearance;
- b. All electrical systems must be properly grounded;
- c. Extension cords shall be of a grounded type, and of an appropriate rating;
- d. Extension cords and power strips shall not be “daisy chained” (connecting multiple devices);
- e. Relocatable power taps shall be of the polarized or grounded type, equipped with overcurrent protection, and shall be listed in accordance with UL 1363;
- f. Relocatable power taps shall be directly connected to a permanently installed receptacle;
- g. Extension cords and relocatable power tap cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage;
- h. Extension cords shall be plugged directly into an approved receptacle, power tap or multi-plug adapter and, except for approved multi-plug extension cords, shall serve only one portable appliance;
- i. Extension cords shall be maintained in good condition without splices, deterioration or damage;

- j. Extension cords shall be grounded where serving grounded portable appliances.
- k. Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes;
- l. Electrical appliances and fixtures shall be tested and listed in published reports of inspected electrical equipment by an approved agency and installed and maintained in accordance with all instructions included as part of such listing;
- m. Temporary wiring attached to a structure shall be attached in an approved manner;
- n. Extension cords on the ground or in areas traveled by the public must be protected by approved covers (i.e., electrical bridges);
- o. If a generator or other additional power source is proposed, contact the Building Division prior to installation (408-615-2420). Submittal of three (3) sets of plans and a minimum of four weeks for review may be required.

**6. Decorative Materials:**

- a. All decorative materials including (draperies, artificial plants, etc.) used for construction or decoration shall be flame retardant and flame certificates shall be provided;
- b. Artificial vegetation is regulated according with Chapter 8 of the California Fire Code and National Fire Protection Association (NFPA) 701 standard;
- c. Flame resistance compliance is preferred to be indicated by tag affixed to each curtain, drape or textile. Flame resistance certifications shall be available to the Fire Department Inspectors. Decorative textiles, drapes, curtains and the like shall be flame retardant as tested by NFPA 701;
- d. Foam plastics, other than poster boards, shall not be permitted. SCFD will consider foam plastics complying with the currently adopted Building Code. A separate Fire Protection Report demonstrating compliance with the Building Code is required for foam plastics;
- e. Fire resistant foam board signage, not than 1/2-inch in thickness, is acceptable.

**7. Public Safety Plan & Crowd Managers:**

Where the Fire Prevention & Hazardous Materials Division determines that an indoor or outdoor gathering of persons has an adverse impact on public safety through diminished access to buildings, structures, fire hydrants and fire apparatus access roads or where such gatherings adversely affect public safety services of any kind, the fire code official shall have the authority to order the development of or prescribe a public safety plan that provides an approved level of public safety and addresses the following items:

- a. Emergency vehicle ingress and egress;
- b. Fire protection;
- c. Emergency egress or escape routes;
- d. Emergency medical services;
- e. Evacuation assembly areas;
- f. The directing of both attendees and vehicles, including the parking of vehicles;
- g. Vendor and food concession distribution;
- h. The need for the presence of law enforcement;
- i. The need for fire and emergency medical services personnel.

Where facilities or events involve a gathering of more than 1,000 people, crowd managers shall be provided

when determined necessary by the fire code official. The minimum number of crowd managers shall be established at a ratio of one crowd manager for every 250 persons.

**Exception:** Where approved by the fire code official, the number of crowd managers shall be permitted to be reduced based upon the nature of the event.

Crowd managers are required to be adequately trained, and their duties as crowd managers shall include, but not be limited to:

- a. Conduct an inspection of the area of responsibility and identify and address any egress barriers;
- b. Conduct an inspection of the area of responsibility to identify and mitigate hazards;
- c. Direct and assist the event attendees in evacuation during an emergency;
- d. Assist emergency response personnel where requested;
- e. Other duties required by the fire code official;
- f. Other duties as specified in the fire safety plan.

### **PLAN REVISIONS & RESUBMITTALS:**

1. Revisions to approved plans are required to be submitted and approved prior to the start of the event. Changes to plans shall be “Clouded” and assigned a delta number referencing the date of modification.
2. Re-submittals shall include a written response to each of the previous plan review comments. Changes to the plans shall be “Clouded” and assigned a delta number referencing the date of the modification.